

## ABSTRACT OF THE DISCLOSURE

A cross dichroic prism for color decomposition includes a blue-reflecting dichroic film for reflecting a blue light component and a red-reflecting dichroic film for reflecting a red light component. Each dichroic film comprises lower and higher refractive index materials alternately laminated on a prism base. The cross dichroic prism satisfies  $1.105 \leq N_h/N_l \leq 1.450$  if  $N_g \leq N_l$ , or  $1.118 \leq N_h/N_l \leq 1.150$  if  $N_g > N_l$ , where  $N_g$  is the refractive index of the prism base,  $N_h$  is the refractive index of the higher refractive index material, and  $N_l$  is the refractive index of the lower refractive index material.